ABSTRACT OF THE DISCLOSURE

A ring selection method for a dual ring network to perform node-to-node packet transmission. A transmission node transmits a reception node address request message for packet transmission to all nodes, and updates a routing table using information on a short path transferred from the reception node. The information on inter-node hop numbers included in the routing table is used to select a ring having the lowest hop number between the reception nodes It is then determined whether the selected ring is wrapped, and if the ring is not wrapped, comparing its usage rate and hop number to the reception node with reference values based on a ring selection algorithm; and if the ring is suitable based on the reference values, selecting the ring for packet transmission.